REFERENCES

- Agee, J.K. 1993. Fire ecology of Pacific Northwest forests. Island Press, Washington, D.C. 493pp.
- Alt, D. and D. Hyndman. 1995. Northwest Exposures: A Geologic Story of the Northwest. Mountain Press Publishing Company. Missoula Montana. 442pp.
- Barrett, S. W., S. F. Arno, and J. P. Menakis. 1997. Fire episodes in the inland Northwest (1540-1940) based on fire history data. U.S. Forest Service, Intermountain Research Station. General Technical Report INT-GTR-370. 17 pp.
- Bessie, W.C., Johnson, E.A., 1995. The relative importance of fuels and weather on fire behavior in subalpine forests. Ecology 76, 747-762.
- Brinson, M.M., B.L. Swift, R.C. Plantico, and J.S. Barclay. 1981. Riparian ecosystems: their ecology and status. USDI Fish and Wildlife Service, Biological Services Program, Kearneysville, West Virginia, USA.
- British Columbia Parks. 1999. Ministry of Water, Land and Air Protection.

 www.gov.bc.ca/bcparks/explore/parkpgs/snowy. Queen's Printer for British Columbia,
 Canada.
- Brittell, J.E., R.J. Poelker, S.J. Sweeney, and G.M. Koehler. 1989. Native cats of Washington. Section III: Lynx. Wash. Dep. Of Wildlife, Olympia, WA. 169p.
- Brown, E. R., ed. 1985. Management of Wildlife and Fish Habitats in Forests of Western Oregon and Washington. U.S. Department of Agriculture, Forest Service, Pacific Northwest Region, Portland. 2 v.
- Bull, E.L., 1978. Specialized habitat requirements of birds: snag management, old growth, and riparian habitat. Pages 74-82 in R.M. DeGraaf, technical coordinator. Proceedings of the Workship on Nongame Bird Habitat Management in the Coniferous Forests of the Western United States. U.S. Forest Service General Technical Report PNW-64.
- Elzinga, C.L., D. W. Salzer, and J.W. Willoughby. 1998. Measuring and monitoring plant populations. U.S. Dept. of the Interior, Bureau of Land Management BLM/RS/ST-98/005 1730-1.
- Fox, J.F. 1978. Forest fires and snowshoe hare-Canada lynx cycle. Oecologia 31:349-374.
- Franklin, J.F., and C.T. Dyrness. 1973. Natural Vegetation of Oregon and Washington. Oregon State University Press, Oregon.
- Hibbard, M. J., 1971, Evolution of a plutonic complex, Okanogan Range, Washington: Geological Society of America Bulletin, v. 82, no. 11, p. 3013-3047, 1 plate.
- Hutchins, H.E. 1994. Role of various animals in dispersal and establishment of whitebark pine in the Rocky Mountains, U.S.A. *In* Proceedings International workshop on subalpine stone pines and their environment: The status of our knowledge. USFS GTR INT 309.
- Interagency Grizzly Bear Committee. 1986. Interagency Grizzly Bear Committee Guidelines. U.S. Forest Service, Washington, D.C.

- Johnson, K. 2000. Internal Memo: Spruce Beetle Management Strategies. Forest Health, Department of Natural Resources, Olympia, WA.
- Johnson, R.R., L.T. Haight, and J.M. Simpson. 1977. Endangered species vs. endangered habitats: a concept. Pages 68-97 in R.R. Johnson and D.A. Jones, technical coordinators. Importance, preservation and management of riparian habitat: a symposium. U.S. Forest Service General Technical Report RM-166.
- Jones, J.L., and E.O. Garton. 1994. Selection of successional stages by fishers in north-central Idaho. Pages 377-387 *in* martens, sables, and fishers: biology and conservation (Buskirk, S.W., A. Harestad, and M. Raphael, eds.). Cornell University Press, Ithaca, NY.
- Joslin, G., and H. Youmans, coordinators. 1999. Effects of recreation on Rocky Mountain Wildlife: A review for Montana. Committee on Effects of Recreation on Wildlife, Montana Chapter of the Wildlife Society. 307 pp.
- Kesterson, M.D. 1988. Lynx home range and spatial organization in relation to population density and prey abundance. M.S. thesis. Univ. Alaska, Fairbanks. 66p.
- Knopf, F.L. 1985. Significance of riparian vegetation to breeding birds across an altitudinal cline. Pages. 105-111 in R.R. Johnson, C.D. Ziebell, D.R. Patten, P.F. Ffolliot, and R.H. Hamre, technical coordinators. Riparian ecosystems and their management: reconciling conflicting uses. U.S. Forest Service General Technical Report RM-120.
- Koehler, G.M. 1990. Population and habitat characteristics of lynx and snowshoe hares in north-central Washington. Can. J. Zool. 68:845-851.
- Koehler, G.M., M.G. Hornocker, and H.S. Hash. 1979. Lynx movements and habitat use in Montana. Canadian Field Naturalist 93:441-442.
- Laufer, J.R., and P.T. Jenkins. 1989. Historical and present status of the grey wolf in the Cascade Mountains of Washington. Northwest Environmental Journal 5:313-327.
- Lewis, J.C., and D.W. Stinson. 1998. Washington State status report for the fisher. Washington Department of Fish and Wildlife, Olympia. 64pp.
- Lillybridge, T.R., Kovalchik, B.L., Williams C.K., and B.G. Smith. 1995. Field guide for forested plant associations of the Wenatchee National Forest. Gen. Tech. Report PNW-GTR-359. Portland, OR: US Dept. Of Agriculture, Forest Service, PNW Research Station. 335 p.
- Magoun, A.J. and J. P. Copeland. 1998. Characteristics of wolverine reproductive den sites. Journal of Wildlife Management 62(4):1313-1320.
- Major, A.R. 1989. Lynx (*Lynx canadensis*) predation patterns and habitat use in the Yukon Territory, Canada. Unpubl. M.S. thesis. SUNY Coll. Of Environmental Science and Forestry. Syracuse, NY. 75p.
- Mech, L.D., T.J. Meier, and J.W. Burch. 1991. Denali Park wolf studies: implications for Yellowstone. Transactions of the North American Wildlife and Natural Resources Conference 56:86-90.
- North Cascades National Park. 1998. Wolves in the North Cascades: Questions and Answers. http://www.nps.gov/noca/wolf.htm

- Oakley, A.L., J.A. Collins, L.B. Everson, D.A. Heller, J.C. Howerton, and R.E. Vincent. 1985. Riparian zones and freshwater wetlands. Pages 57-80 in E.R. Brown, ed. Management of wildlife and fish habitats in forests of western Oregon and Washington. USDA Forest Service General Technical Report R6-FandWL-192-1985.
- Parker, G.R. 1981. Winter habitat use and hunting activities of lynx (*Lynx canadensis*) on Cape Breton Island. Can. J. Zool. 61:770-786.
- Pearson, S.F., and D.A. Manuwal. 2001. Breeding bird response to riparian buffer width in managed Pacific Northwest Douglas-fir forests. Ecological Applications 11:840-853.
- Pelham, J. 1993. Butterflies of the Loomis Block: An annotated list. Unpublished report to DNR.
- Rinehart, C. Dean, 1981, Reconnaissance geochemical survey of gully and stream sediments, and geologic summary, in part of the Okanogan Range, Okanogan County, Washington: Washington Division of Geology and Earth Resources Bulletin 74, 24 p., 3 plates.
- Rinehart, C. D.; Fox, K. F., Jr., 1972, Geology and mineral deposits of the Loomis quadrangle, Okanogan County, Washington: Washington Division of Mines and Geology Bulletin 64, 124 p., 3 plates.
- Ruediger, Bill, Jim Claar, Steve Gniadek, Bryon Holt, Lyle Lewis, Steve Mighton, Bob Naney, Gary Patton, Tony Rinaldi, Joel Trick, Anne Vandehey, Fred Wahl, Nancy Warren, Dick Wenger, and Al Williamson. 2000. Canada lynx conservation assessment and strategy. USDA Forest Service, USDI Fish and Wildlife Service, USDI Bureau of Land Management, and USDI National Park Service. Missoula, MOUNTAIN
- Russell, K. 1994. Memo. Loomis: Mountain Pine Beetles and Forest Management. Forest Health, Department of Natural Resources, Olympia, WA.
- Saunders, J.K. 1961. The biology of the Newfoundland lynx. Ph.D. Dissertation. Cornell Univ., Ithaca, NT. 109p.
- Squires, J.R. and L.F. Ruggiero. 1996. Winter movements of adult northern goshawks that nested in south-central Wyoming. Journal of Raptor Research 29:189-190.
- Squires, J. R., and R. T. Reynolds. 1997. Northern Goshawk (*Chaetura vauxi*). In The Birds of North America, No. 298 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.
- Stinson, D.W. 2001. Washington state recovery plan for the lynx. Washington Department of Fish and Wildlife, Olympia, Washington. 78 pp. +5 maps.
- Staples, W.R., III. 1995. Lynx and coyote diet and habitat relationships during low hare population and the Kenai National Wildlife Refuge, Alaska. Unpubl. M.S. thesis. Univ. Alaska, Fairbanks, Alaska. 150p.
- Stoffel, K. L., compiler, 1990, Geologic map of the Oroville 1:100,000 quadrangle, Washington: Washington Division of Geology and Earth Resources Open File Report 90-11, 58 p., 1 plate.
- Stoffel, K.L., N.L. Joseph, S.Z. Waggoner, C.W. Gulick, M.A. Korosec, B.B. Bunning. 1991. Geologic map of Washington--Northeast quadrant: Washington Division of Geology

- and Earth Resources Geologic Map GM-39, 3 sheets, scale 1:250,000, with 36 p. text. DGER call number: QE175 A3 M3 39.
- Thompson, I.D., I.J. Davidson, S. O'Donnell, and F. Brazeau. 1989. Use of track transects to measure the relative occurrence of some boreal mammals in uncut forest and regeneration stands. Can. J. Zool. 67:1816-1823.
- Thomas, J.W., C. Maser, and J.E. Rodieck. 1979. Riparian zones. Pages 40-47 in J.W. Thomas, ed. Wildlife habitats in managed forests; the Blue Mountains of Oregon and Washington. USDA Forest Service Agricultural Handbook No. 553.
- USDA Forest Service. 2001. Okanogan forest travel plan.
- USDA Forest Service. 1979. Forest insect and disease leaflet 2. 7pp.
- USDA Forest Service. 1999. Forest insect and disease leaflet 127. 11pp.
- USDA Forest Service. Recreation Information. www.recreationalland.com/okanogan national forest.
- U.S. Fish and Wildlife Service. 1993. Grizzly bear recovery plan. U.S. Department of the Interior, Fish and Wildlife Service, Missoula, MOUNTAIN 181pp.
- U. S. Fish and Wildlife Service (USFWS). 2000. Proposal to reclassify and remove the gray wolf from the list of endangered and threatened wildlife in portions of the conterminous United States; Proposal to establish three special regulations for threatened gray wolves. Federal Register 65(135):43450-43496.
- U.S. Fish and Wildlife Service. 2000. Grizzly bear recovery: overview and update. http://pacific.fws.gov/news/grizzly/grizzlybearbkgrnd.htm.
- Washington Conservation Commission. 1994. Ecosystem standards for state-owned agricultural and grazing land. Prepared by the Ecosystem Standards Advisory Committee, Olympia, WA. 87 pp.
- Washington Department of Fish and Wildlife. June 2002. Species of concern list. www.wa.gov/wdfw/wlm/diversty/soc/concern.htm
- Washington Department of Natural Resources. 1992. Forest resource plan: policy plan, final. Washington Department of Natural Resources, Forest Land Management Division, Olympia. 53 pp.
- Washington Department of Natural Resources. 1992. Natural Resources Conservation Areas: Statewide Management Plan. Natural Areas Program, Olympia, WA. 33p.
- Washington Natural Heritage Program. 1997. Endangered, threatened, and sensitive vascular plants of Washington with working lists of rare non-vascular species. Department of Natural Resources. Olympia. 62p.
- West, S.D. 1988. Introduction: riparian systems in wildlife. Pages 56-60 in K.J. Raedeke, ed. Streamside management: riparian wildlife and forestry interactions. University of Washington Press, Seattle, Washington, USA.

APPENDICES

A.Legal Boundary Description

Loomis NRCAs – Okanogan County

NORTH BLOCK (TOWNSHIP 40)

In Township 40 North, Range 24 East, W.M.

<u>Section</u>	Subdivision
1	E½SE¼
2	GOV LOT 4; SW1/4NW1/4; W1/2SW1/4; SE1/4SW1/4
3	ALL (Fractional Section)
4	ALL (Fractional Section)
5	ALL (Fractional Section)
6	GOV LOT 1-3; S1/2NE1/4; SE1/4
8	ALL
9	ALL
10	ALL
11	NW1/4; NW1/4SW1/4
12	SE1/4SW1/4; E1/2
13	E½NW¼NW¼; E½NW¼; SW¼; E½
15	W½; W½E½; S½SE¼SE¼
16	ALL
17	ALL
20	ALL
21	ALL
22	ALL
23	S½
24	ALL
26	N½N½
27	ALL
28	ALL
29	ALL
32	ALL
33	ALL
34	ALL

TOTAL ACRES NORTH BLOCK: 13,991.72

SOUTH BLOCK (UPPER SINLAHEKIN)

In Township 38 North, Range 23 East, W.M.

<u>Section</u>	Subdivision
13	S1/2SE1/4
23	SE1/4
24	ALL
25	ALL
26	E1/2
35	E1/2
36	ALL

In Township 38 North, Range 24 East, W.M.

18	GOV LOT 4
19	GOV LOT 1-4; E½W½; S½SE1/4
29	W½W½
30	ALL (Fractional Section)
31	ALL (Fractional Section)
32	W½W½

In Township 37 North, Range 23 East, W.M.

1	ALL (Fractional Section
12	ALL
13	ALL
24	N½

In Township 37 North, Range 24 East, W.M.

iii romnomp o	Hortin, Rango 24 East, William
5	GOV LOT 4; SW1/4NW1/4; W1/2SW1/4
6	ALL (Fractional Section)
7	ALL (Fractional Section)
8	W½NW¼; SW¼; S½SE¼
17	ALL
18	ALL (Fractional Section)
19	GOV LOT 1-2; E½NW¼; E½
20	ALL

TOTAL ACRES SOUTH BLOCK: 10,677.97

TOTAL ACRES (North and South) 24,669.69

B.Bureau of Land Management Wilderness Study Area

The following information is from the Chopaka Wilderness Study conducted in 1982.

A threatened and endangered plant inventory was conducted, and eight species proposed for State Listing were found in and near the study area.

The eight sensitive plant species are:

Draba aurea yellow drabe

Dodecatheon pulchellum var. wattsonii few-flowered shooting star

Potentilla quinquefolia five-leaved cinquefoil

Potentilla nivea snow cinquefoil

Potentilla diversifolia var. perdissecta diverse leaved cinquefoil

Salix tweedyi Tweedy's willow

Gentiana glauca glaucous gentian

Carex scirpoidea var. scirpoidea Canadian single spike sedge

C.Status Categories for Wildlife and Plants

U.S. Fish and Wildlife Service Status Categories for Wildlife and Plants

Candidate - Plants and animals that have been studied and the Service has concluded that they should be proposed for addition to the Federal endangered and threatened species list. These species have formerly been referred to as category 1 candidate species. From the February 28, 1996 Federal Register, page 7597: "those species for which the Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposed rule to list but issuance of the proposed rule is precluded."

Endangered - The classification provided to an wildlife or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.

Threatened - The classification provided to an wildlife or plant likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

<u>Washington Natural Heritage Program Status Categories for Vascular Plants</u>

Plant taxa are assigned a statewide status by the Washington Natural Heritage Program. The state Endangered Species Act in Washington does not include provisions to list or protect plant species. Therefore, the lists included in the Endangered, Threatened and Sensitive Vascular Plants of Washington with Working Lists of Rare Non-Vascular Species (1997) have no statewide legal authority; they are advisory only. This publication serves as the most current reference on the status of Washington's rare plant taxa (WA Natural Heritage Program 1997). The first four of the six categories (endangered, threatened, sensitive and, possibly extinct or extirpated in Washington) are intended to convey the relative degree of threat that individual taxa are under in Washington and consequently, the level of concern and protection that each should receive (WA Natural Heritage Program 1997).

Endangered This status is assigned to each vascular plant taxon in danger of becoming extinct or extirpated in Washington within the near future if factors contributing to its decline continue. Populations of these taxa are at critically low levels or their habitats have been degraded or depleted to a significant degree.

Threatened Any taxon likely to become Endangered in Washington within the foreseeable future if factors contributing to its population decline or habitat degradation or loss continue.

Sensitive Any taxon that is vulnerable or declining and could become Endangered or Threatened in the state without active management or removal of threats.

Possibly Extinct or Extirpated from Washington Based on recent field searches, a number of plant taxa are considered to be possibly extinct or extirpated from Washington. Taxa in this group are all high priorities for field investigations. If found, they will be assigned one of the above status categories.

Review This category consists of two groups of taxa for which more information is needed to accurately assess their status. Group 1 (i.e. R1) includes taxa for which additional field work is needed before a status can be assigned. Group 2 (i.e. R2) includes taxa with unresolved taxonomic questions.

Watch This status is assigned to each vascular plant taxon that is more abundant and/or less threatened in Washington than previously assumed. Although the Washington Natural Heritage Program does not focus on these taxa, information about them is still gathered and stored in our information system.

<u>Washington State Department of Fish and Wildlife Species Status</u> <u>Categories for Wildlife</u>

Species of Concern in Washington include those species listed as State Endangered, State Threatened, State Sensitive, or State Candidate, as well as species listed or proposed for listing by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service.

State Endangered Species is defined in WAC 232-12-297, Section 2.4, to include "any wildlife species native to the state of Washington that is seriously threatened with extinction throughout all or a significant portion of its range within the state."

State Threatened Species is defined in WAC 232-12-297, Section 2.5, to include "any wildlife species native to the state of Washington that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range within the state without cooperative management or removal of threats."

State Sensitive Species is defined in WAC 232-12-297, Section 2.6, to include "any wildlife species native to the state of Washington that is vulnerable or declining and is likely to become endangered or threatened throughout a significant portion of its range within the state without cooperative management or removal of threats."

State Candidate Species is defined in WDFW Policy M-6001 to include fish and wildlife species that the Department will review for possible listing as State Endangered, Threatened, or Sensitive. A species will be considered for designation as a State Candidate if sufficient evidence suggests that its status may meet the listing criteria defined for State Endangered, Threatened, or Sensitive.

Global and State Ranking System

The ranking system used by the Natural Heritage Network facilitates a quick assessment of a taxon's global and state rarity. Each taxon is assigned both a global (G) and state (S) rank of 1 to 5. The rank is based on the number of known occurrences, quality of habitat, number of individuals, population and habitat trends, threats, etc. All state (S) ranks have been assigned by the Washington Natural Heritage Program. Global (G) ranks have been assigned by various state Natural Heritage Programs (WA Natural Heritage Program 1997). Some species have two G ranks or two S ranks and this indicates uncertainty between two ranks.

State Rank

State rank characterizes the relative rarity or endangerment within the state of Washington. Factors including, but not limited to, number of known occurrences are considered when assigning a rank. Two codes together represent an inexact range (e.g., S1S2) or different ranks for breeding and non-breeding populations (e.g., S1B, S3N).

Values and their definitions:

- S1 = Critically imperiled in the state because of extreme rarity or other factors making it especially vulnerable to extirpation from the state. (Typically 5 or fewer occurrences or very few remaining individuals or acres)
- S2 = Imperiled in the state because of rarity or other factors making it very vulnerable to extirpation from the state. (Typically 6 to 20 occurrences or few remaining individuals or acres)
- S3 = Rare or uncommon in the state. (Typically 21 to 100 occurrences)
- S4 = Widespread, abundant, and apparently secure in state, with many occurrences, but the taxon is of long-term concern. (Usually more than 100 occurrences)
- S5 = Demonstrably widespread, abundant, and secure in the state; believed to be ineradicable under present conditions.
- SH = Historical occurrences only are known, perhaps not verified in the past 20 years, but the taxon is suspected to still exist in the state.
- SP = Potential for occurrence of the the taxon in the state but no occurrences have been reported.

- SR = Reported in the state but without persuasive documentation which would provide a basis for either accepting or rejecting the report (e.g., misidentified specimen).
- SRF = Reported falsely in the state but the error persists in the literature.
- SU = Uncertain. Possibly in peril in the state, but status is uncertain. More information is need.
- SX = Believed to be extirpated from the state with little likelihood that it will be rediscovered.
- S? = Not yet ranked. Sufficient time and effort have not yet been devoted to ranking of this taxon.

Qualifiers are sometimes used in conjunction with the State Ranks described above:

- B Rank of the breeding population in the state.
- N Rank of the non-breeding population in the state.

B and N qualifiers are used to indicate breeding and non-breeding rank of migrant species whose non-breeding rank may be quite different from their breeding rank in the state (e.g., S1B, S4N for a very rare breeder that is a common winter resident).

? qualifier is used with numeric ranks to denote uncertainty; more information may be needed to assign a rank with certainty. The '?' qualifies the character it follows (e.g., SE? denotes uncertainty of exotic status).

SnSn Two codes (i.e., S1S2) are used to indicate a range of ranks.

Global Rank

Global rank characterizes the relative rarity or endangerment of the element world-wide. Factors including, but not limited to, number of occurrences are considered when assigning a rank.

Values and their definitions:

- G1 = Critically imperiled globally because of extreme rarity or because of some factor(s) making it especially vulnerable to extinction. (Typically 5 or fewer occurrences or very few remaining individuals or acres).
- G2 = Imperiled globally because of rarity or because of some factor(s) making it very vulnerable to extinction throughout its range. (6 to 20 occurrences or few remaining individuals or acres).
- G3 = Either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range (e.g., a single western state, a physiographic region in the East) or because of other factors making it vulnerable to extinction throughout its range. (21 to 100 occurrences)

- G4 = Widespread, abundant, and apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery. Thus, the Element is of long-term concern. (Usually more than 100 occurrences)
- G5 = Demonstrably widespread, abundant, and secure globally, though it may be quite rare in parts of its range, especially at the periphery.
- GU = Unrankable. Possibly in peril range-wide but status uncertain. More information is needed.
- G? = Not yet ranked. Sufficient time and effort have not yet been devoted to ranking of this taxon.

Qualifiers are used in conjunction with the Global Ranks described above:

Tn Where n is a number or letter similar to those for Gn ranks, above, but indicating subspecies or variety rank. For example, G3TH indicates a species that is ranked G3 with this subspecies ranked as historic.

- Q = Questionable. Taxonomic status is questionable and the numeric rank may change with taxonomy.
- ? = The specified rank is uncertain; more information may be needed to assign a rank with certainty.

GnGn Two codes (i.e., G1G2) are used to indicate a range of ranks.

D.Common and Scientific Names

Common Name Scientific Name

Plants

California brome Bromus carinatus
Canada thistle Cirsium arvense

Cascade azalea Rhododendron albiflorum

Cheatgrass Bromus tectorum
Cinquefoil Potentilla sp.

Common houndstongue Cynoglossum officinale
Common snowberry Symphoricarpos albus

Desert-parsley Lomatium sp.

Diffuse knapweed Centaurea diffusa

Dogwood bunchberry Cornus canadensis

Douglas fir Pseudotsuga menziesii

Engelmann spruce Picea engelmannii

Groundsel Senecio sp.

Grouse huckleberry Vaccinium scoparium

Heartleaf arnica Arnica cordifolia
Horsetail Equisetum sp.

Idaho fescue Festuca idahoensis

Kinnikinnick Arctostaphylos uva-ursi

Knapweed Centaurea spp.

Labrador tea Ledum glandulosum

Lodgepole pine Pinus contorta var. latifolia

Low huckleberry Vaccinium myrtillus

Lupine Lupinus sp.

Mountain big sagebrush Artemisia tridentata ssp. vaseyana

Mountain snowberry Symphoricarpos oreophilus

Mountain sorrel Oxyria digyna

Ninebark Physocarpus malvaceus

Plants Continued

Pachistima Pachistima myrsinites

Pinegrass Calamagrostis rubescens

Ponderosa pine
Prairie smoke
Purple oniongrass
Pussytoes
Pinus ponderosa
Geum triflorum
Melica spectabilis
Antennaria sp.

Quaking aspen Populus tremuloides

Rush Juncus sp.

Russian knapweed Acroptilon repens

Sedge Carex sp.

Shiny-leaf spirea Spirea betulifolia
Snowbrush Ceanothus sp.

Spotted knapweed Centaurea maculata
Spotted saxifrage Saxifraga broncialis
St. John's wort Hypericum perforatum

Starry false Solomon seal Smilacina stellata

Strawberry Fragaria sp.

Subalpine fir Abies lasiocarpa
Twinflower Linnaea borealis

Two-spiked moonwort Botrychium paradoxum

Western larch

Larix occidentalis

Western wheatgrass

Pascopyrum smithii

Wheeler bluegrass Poa nervosa
Whitebark pine Pinus albicaulis

Willow Salix sp.

Yarrow Achillea millefolium

Wildlife

Beaver Castor canadensis
Black bear Ursus americanus
Black-backed woodpecker Picoides arcticus

Bobcat Lynx rufus

Boreal chickadee Poecile hudsonicus
Boreal owl Aegolius funereus
California bighorn sheep Ovis canadensis
Canada lynx Lynx canadensis

Chipmunk Tamias sp.

Clark's nutcracker Nucifraga columbiana

Cougar Felis concolor
Coyote Canis latrans
Elk Cervus elaphus
Gray wolf Canis lupus

Great gray owl Strix nebulosa

Grizzley bear Ursus arctos horribilis

Ground squirrel Spermophilus sp.

Marmota caligata

Moose Alces alces

Mountain goat

Mule deer

Odocoileus hemionus

Northern bog lemming

Synaptomy borealis

Pine grosbeak

Pinicola enucleator

Raven Corvus corax

Red squirrel Tamiasciurus hudsonicus

Snowshoe hare Lepus americanus

Spruce grouse Falcipennis canadensis

Stellar jay Cyanocitta stelleri
Three-toed woodpecker Picoides tridactylus
White-tailed deer Odocoileus virginianus

White-tailed ptarmigan Lagopus leucurus
Wolverine Gulo gulo luscus